Elytra, Tokyo, **33** (2): 403–411, November 19, 2005

Studies on Cerambycidae of Taiwan and Adjacent Regions

II. Two New Lepturine Species of the Genus *Pidonia* MULSANT (Coleoptera, Cerambycidae) from the Subalpine Zone of Southern Taiwan

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Abstract Two new species belonging to the subgenus *Cryptopidonia* of the lepturine genus *Pidonia* are described and illustrated from the subalpine zone of Taiwan. One of them is related to *P.* (*C.*) *pilushana* S. SAITO and is named *P.* (*C.*) *yushana*, and the other is related to *P.* (*C.*) *albomaculata* (MATSUSHITA) and is named *P.* (*C.*) *luna*.

Key words: Cerambycidae, *Pidonia*, new species, taxonomy, Taiwan.

Thirty-three species of the lepturine genus *Pidonia* have so far been recorded from Taiwan; *viz.*, 13 species belong to the subgenus *Pidonia*, 9 species to *Mumon* and 11 species to *Cryptopidonia*. In this paper, we will add two new species belonging to the subgenus *Cryptopidonia* occurring in the subalpine zone of southern Taiwan. One of them, *P.* (*C.*) *yushana*, was found in the coniferous and broadleaved mixed forest on Tatachia-Anbu of Chayi County at about 2,450–2,600 m in altitude. The other species, *P.* (*C.*) *luna*, was also found in the same kind of forest as for the preceding species on Mt. Chuyunshan of Kaohsiung County at about 2,300 m in altitude.

Depositories

NTU	National Taiwan University (Taipei, Taiwan)
NMNS	National Museum of Natural Science (Taichung, Taiwan)
NSMT	National Science Museum (Nat. Hist.), Tokyo (Japan)
WIC	Wen-I CHOU private collection (Taipei, Taiwan)

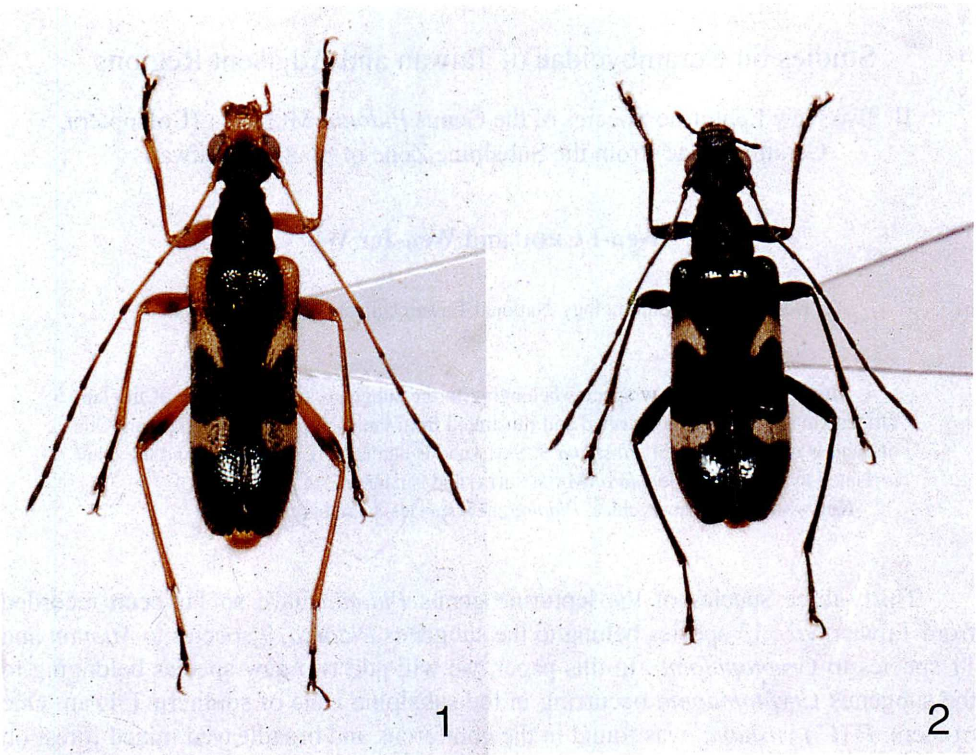
Pidonia* (*Cryptopidonia*) *yushana CHOU et WU, sp. nov.

(Figs. 1–8)

Body small, relatively rounded, slightly tapered apically (male) or robust (female), and furnished with pale fulvous pubescences.

Length: 5.7–7.1 mm (male), 6.5–6.9 mm (female); width: 1.5–1.8 mm (male), 1.7–1.9 mm (female).

Color. Male:—Body yellowish fulvous to black; head black; mouthparts brown,



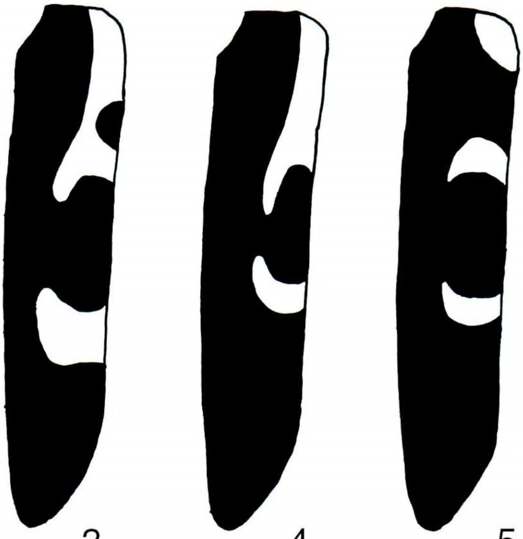
Figs. 1–2. *Pidonia* (*Cryptopidonia*) *yushana* CHOU et WU, sp. nov. —— 1, Male, holotype; 2, ditto, female, paratype.

except for dark brown apices of mandibles; eyes black; antenna brown, last four segments dark reddish brown; pronotum black except for reddish brown basal and apical margins; scutellum brown; coxae and trochanters fulvous; femora brown except for dark reddish brown apices of hind legs; tibiae brown; tarsi dark brown; claws reddish brown. Elytra yellowish fulvous with black markings as follows: sutural marking large, broadened basally, gradually narrowed apically; basal marking absent; lateral-basal marking frequently absent, obscure if present; lateral-median marking prominently well developed, oblong; lateral-posterior marking absent; apical band broadened. Venter of head and prosternum fulvous; mesosternum dark reddish brown; metasternum black; abdomen in 1st and 2nd segments black, 3rd–5th fulvous.

Female:—Dark markings more developed and enlarged than in male; mouthparts black; antenna blackish brown; scutellum black; coxae and trochanters fulvous; femora black; tibiae and tarsi dark brown; claws reddish brown. Elytra dull metallic black with two pairs of arcuate whitish yellow markings. Venter of head, prosternum, meso- and metasterna black; abdomen in 1st and 2nd segments black, 3rd–5th brown.

Structure. Head across eyes broader than the basal width of pronotum in both sexes (1.09 : 1), narrowed posteriad and abruptly constricted at neck; terminal segment of maxillary palpus broadened at middle, convex along outer margin and tapering towards apex; tempora well developed, nearly smooth and densely clothed with setae on surface; frons subvertical and transverse, finely punctulate; vertex weakly convex above, densely punctulate with fine sculptures, densely clothed with fine pubescence; gula shining, sparsely covered with short pubescence. Eyes relatively prominent, moderately faceted, shallowly emarginate at middle of internal margins. Antenna long and slender, inserted just behind the level of frontal margin of eye, slightly shorter (male) or distinctly shorter (female) than body; first segment distinctly dilated towards apex, sparsely covered with fine erect pubescence; last segment 5.8 times (male) or 4.8 times (female) as long as wide; comparative length of each antennal segment formulated as follows : 5th>1st+2nd=3rd>4th>6th (male) or 5th>4th>1st+2nd=3rd>6th (female).

Prothorax slightly longer than the basal width (1.05 : 1 in male; 1.01 : 1 in female), shallowly constricted both behind apex and before base, roundly expanded laterally just before middle, which is slightly wider than (male, 1.05 : 1) or equal to (female, 1 : 1) the basal width; base distinctly broader than apex (1.57 : 1 in male; 1.38 : 1 in female); pronotal disc convex above, finely and closely punctulate, densely clothed with fine pubescence; posterior lateral setae long; prosternum scattered with short pubescence; meso- and metasterna finely punctulate, densely with fine appressed pubescence. Scutellum small and triangular, 0.52 times as long as wide, bearing relatively thick setae on surface. Elytra 2.5 times (male) or 2.34 times (female) as long as the



Figs. 3–5. Variations of elytral marking of *Pidonia* (*Cryptopidonia*) *yushana* CHOU et WU, sp. nov., male.

basal width, gradually narrowed posteriorly (male) or almost parallel-sided (female), connectedly (male) or separately (female) rounded at apices; surface sparsely and finely punctulate, scattered with suberect pubescence, the diameter of each puncture being less than the distance between punctures.

Legs relatively slender, finely punctulate and clothed with short pubescence; femora not reaching elytral apices in both sexes; tibiae linear, with suberect pubescence; tarsi densely with short pubescence on under surface, with third segment strongly dilated apically and deeply emarginate at middle of apex, metatarsus in first segment longer than the following two segments combined.

Abdomen elongate and gradually narrowed apically, densely covered with extremely fine pubescence on surface; apical margin of last sternite truncate and shallowly emarginate at middle (male) or round (female); last tergite round in both sexes.

Male genitalia:—Median lobe long, relatively slender, gradually sclerotized towards apex, strongly curved in basal third and acutely pointed at apex; ventral plate weakly bent inwards at apex. Lateral lobes shorter than median lobe, with apical parts relatively short, curved and densely furnished with long terminal setae.

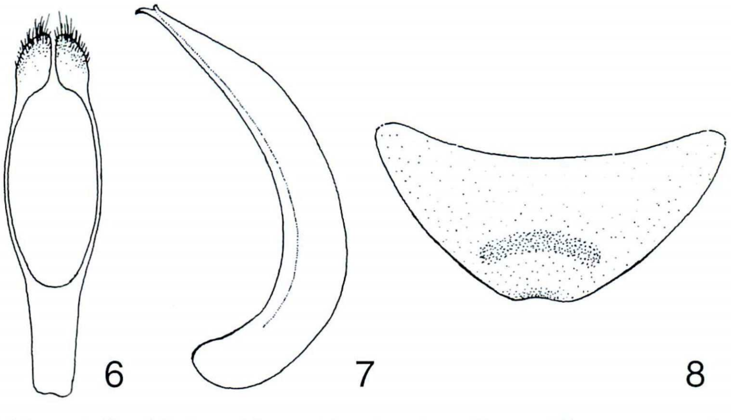
Type series. Holotype: ♂, Tatachia-Anbu, 2,600 m in alt., Chayi County, 20–V–2002, L. H. CHANG leg. (NTU) Paratypes: 10♂♂, 3♀♀, same data as the holotype; 4♂♂, same locality as the holotype, 2,450 m in alt., 16–V–2001, W.-I CHOU leg. (NTU, NMNS, NSMT and WIC).

Distribution. Southern Taiwan.

Flight period. May.

Flower-visiting records. Caprifoliaceae: *Viburnum morrishanense* HAYATA.

Diagnostic notes. This new species is closely related to *P.* (*C.*) *pilushana* S. SAITO, 1979, but can be distinguished from the later by the smaller body size (in *yushana* 5.7–7.1 mm in male or 6.5–6.9 mm in female, while in *pilushana* 7.3–9.0 mm in male or 7.5–9.1 mm in female), the shorter antenna, the truncate and shallowly



Figs. 6–8. Male genitalia of *Pidonia* (*Cryptopidonia*) *yushana* CHOU et WU, sp. nov., male. —— 6, Lateral lobe, dorsal view; 7, median lobe, lateral view; 8, last sternite, ventral view.

emarginate (at middle) apical margin of last abdominal sternite in male (distinctly emarginate at middle in *pilushana*), and the relatively short apical parts of lateral lobes which are densely furnished with long terminal setae.

Etymology. The specific name *yushana* is derived from the type locality, Tatachia-Anbu, which is located on the Yushan Mountains in Chayi County.

Pidonia (Cryptopidonia) luna CHOU et WU, sp. nov.

(Figs. 9, 10, 12, 14–16)

Holotype male. Body small, relatively rounded, slightly tapering apically, and furnished with pale fulvous pubescence.

Length: 6.9 mm; width: 1.8 mm.

Color. Body brown to black; head black; mouthparts brown except for black apices of mandibles; eyes black; antenna dark reddish brown; pronotum black; scutellum black; coxae and trochanters brown; femora dark reddish brown except for black apical 2/3 of hind legs; tibiae dark reddish brown; tarsi blackish brown; claws brown. Elytra dull metallic blue, provided with two pairs of arcuate whitish yellow markings. Venter of head, prosternum, meso- and metasterna black; abdomen in 1st–3rd segments black, apical margins of 3rd segment dark reddish brown, 4th segment reddish brown, 5th segment dark brown.

Structure. Head across eyes broader than the basal width of pronotum (1.2: 1), narrowed posteriorly and abruptly constricted at neck; terminal segment of maxillary palpus broadened apically, with convex outer margin and truncate apex; tempora well developed, finely punctulate and clothed with dense setae on surface; frons subvertical and transverse, finely punctulate; vertex weakly convex above, densely punctulate with fine sculptures and densely with fine pubescence; gula shining, sparsely covered with some short pubescence. Eyes relatively prominent, moderately faceted, shallowly emarginate at middle of internal margins. Antenna long and slender, inserted just behind the level of frontal margins of eyes, slightly longer than body; first segment distinctly dilated towards apex, sparsely covered with fine erect pubescence; last segment 5.2 times as long as wide; comparative length of each antennal segment formulated as follows: 5th>1st+2nd>3rd>4th=6th.

Prothorax equal in length to the basal width, shallowly constricted both behind apex and before base, roundly expanded laterad just before middle and equal in width to base which is distinctly broader than apex (1.42 : 1); disc of pronotum convex above, finely punctulate and densely clothed with fine pubescence; posterior lateral setae long; prosternum sparsely covered with very short pubescence; meso- and metasterna finely punctulate, densely with fine appressed pubescence. Scutellum small and triangular, 0.34 times as long as wide, and bearing relatively fine setae on surface. Elytra 2.38 times as long as the basal width, gradually narrowed posteriorly and separately rounded at apices; surface sparsely and coarsely punctulate, and sparsely clothed with suberect pubescence, the diameter of each puncture being less than the distance be-

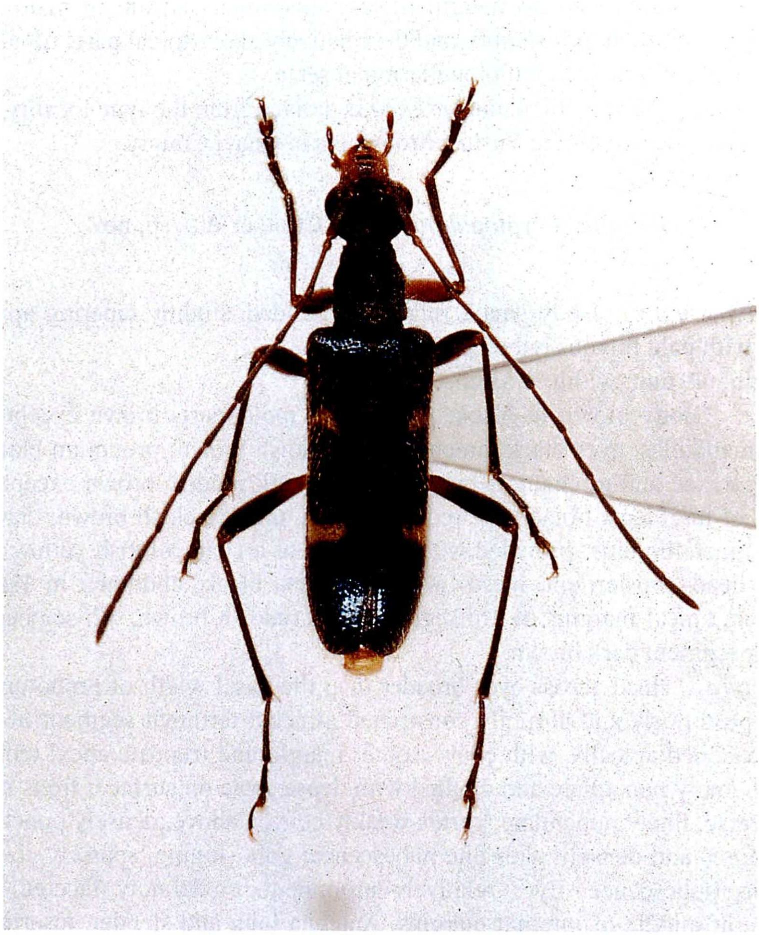
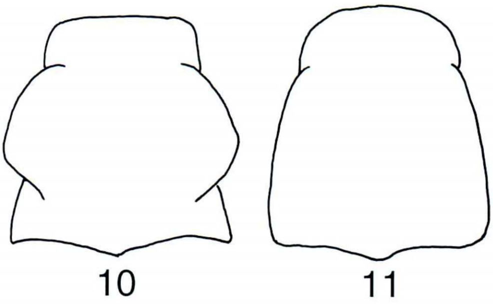
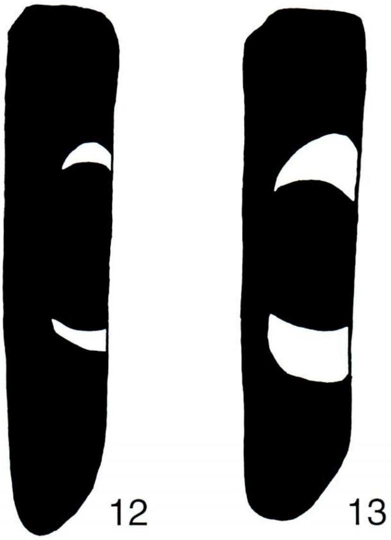


Fig. 9. *Pidonia* (*Cryptopidonia*) *luna* CHOU et WU, sp. nov., male, holotype.



Figs. 10–11. Male pronotum of *Pidonia* (*Cryptopidonia*) spp. —— 10, *P.* (*C.*) *luna* CHOU et WU, sp. nov.; 11, *P.* (*C.*) *albomaculata* (MATSUSHITA).



Figs. 12–13. Male elytral marking of *Pidonia* (*Cryptopidonia*) spp. —— 12, *P.* (*C.*) *luna* CHOU et WU, sp. nov.; 13, *P.* (*C.*) *albomaculata* (MATSUSHITA).

tween punctures.

Legs relatively slender, finely punctulate and clothed with short pubescence; femora not reaching elytral apices; tibiae linear, with suberect pubescence; tarsi densely with short pubescence on under surface, with third segment strongly dilated apically and deeply emarginate at middle of apex, first segment of metatarsus longer than the following two segments combined.

Abdomen elongate and gradually narrowed apically, densely covered with fine pubescence on surface; apical margin of last sternite shallowly triangularly emarginate at middle; last tergite round at apex.

Male genitalia:—Median lobe long, relatively slender, gradually sclerotized towards apex, strongly arcuate in profile, acutely pointed at apex; ventral plate straightly and acutely pointed at apex. Lateral lobes shorter than median lobe, with apical parts relatively long, curved and densely furnished with short terminal setae.

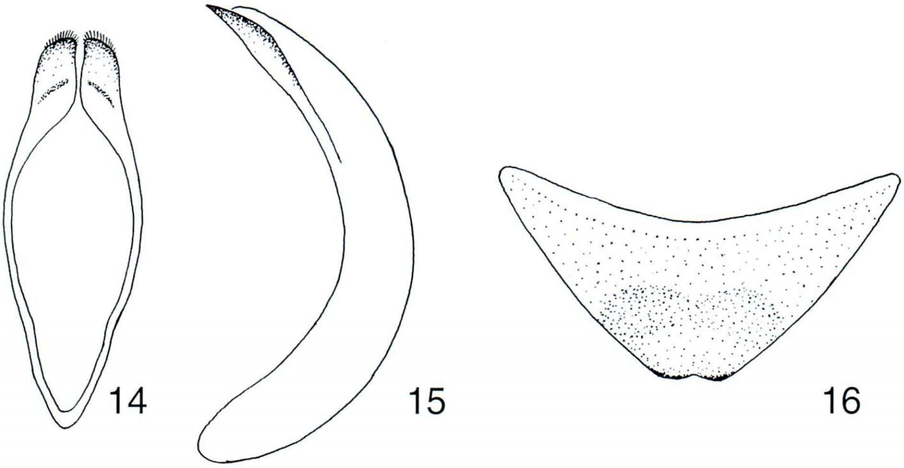
Holotype. ♂, Mt. Chuyunshan, 2,300 m in alt., Kaohsiung County, 11–IV–1996, W.-I CHOU leg. (NTU).

Distribution. Southern Taiwan.

Flight period. April.

Flower-visiting records. Symplococaceae: *Symplocos.*

Diagnostic notes. This species seems to have relationship with *P.* (*C.*) *albomaculata* (MATSUSHITA), but distinguished from the latter by rather short antenna, the different shape of pronotum (Figs. 10, 11), relatively long elytra (2.38 times as long as the basal width in *luna*, whereas 2.20–2.28 times in *albomaculata*), the dull metallic blue



Figs. 14–16. Male genitalia of *Pidonia* (*Cryptopidonia*) *luna* CHOU et WU, sp. nov., —— 14, Lateral lobe, dorsal view; 15, median lobe, lateral view; 16, last sternite, ventral view.

elytra, the yellowish white and thin arcuate elytral markings (whereas pure white and broad in *albomaculata*) (Figs. 12, 13), the slender median lobe, and relatively long apical parts of lateral lobes which are densely furnished with short terminal setae.

Etymology. *Luna*=moon is a noun of Latin origin. This specific name is referred to the arcuate elytral markings of the new species.

Acknowledgements

We wish to express our hearty thanks to Prof. Yu-Feng HSU (National Taiwan Normal University, Taipei) and Dr. Tatsuya NIISATO (Bioindicator Co., Ltd., Tokyo), who kindly read and gave comments on and improved the manuscript, and to Dr. Shun-Ichi UÉNO (NSMT) for allowing us to examine the type specimens of the subfamily Lepturinae deposited in NSMT. We are also indebted to Mr. Shusei SAITO (Japan Wildlife Research Center, Tokyo) and Dr. Akiko SAITO (Natural History Museum and Institute, Chiba) for providing many valuable *Pidonia* specimens including some paratypes for our research, to Dr. Huai-Sheng FANG (Endemic Species Research Institute, Nantou) and Mr. Lien-Hau CHANG, Taichung, for assisting in field works. Mr. Tôru SHIMOMURA, Tokyo, the late Prof. Masao HAYASHI, Osaka, Prof. Mikio KUBOKI, Tokyo, and Prof. Yau-I CHU (NTU) are also acknowledged for their kind assistance in various ways.

要　約

周　文一・呉　文哲：台湾および近隣地域のカミキリムシ科の研究II. 台湾南部亜高山帯のヒ

メハナカミキリ属2新種. —— 台灣南部の塔塔加鞍部および出雲山の針広混交林で採集された標本に基づき，*Cryptopidonia* 亞屬の2新種を記載した.

1) *Pidonia* (*Cryptopidonia*) *yushana* Chou et Wu, sp. nov.（中名新称：玉山隱姫花天牛）.

本新種は *P.* (*C.*) *pilushana* S. Saito に似ているが，体は小さく，触角はより短く，雄腹部腹板末端節の中央は弱く窪むこと，雄交尾器中央片先端はより鋭く狭まり，側片先端の葉片部は比較的短く，長毛を密に備えるなどの特徴から区別は容易である.

2) *Pidonia* (*Cryptopidonia*) *luna* Chou et Wu, sp. nov.（中名新称：月紋隱姫花天牛）.

本新種は *P.* (*C.*) *albomaculata* (Matsushita)に似ているが，触角は短く，前胸背板側縁隆起は顕著で，翅鞘はより長く，金属光沢を伴う鈍藍色で，弧状紋は細く黄白色を呈すること，雄交尾器中央片は比較的細く，側片の葉片部は比較的長く，短毛を密に備えるなどの特徴から区別は容易である.

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